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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/659,018	09/08/2000	David Gabriel	199-1538	3646

29769 7590 03/08/2002

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EXAMINER

DEBERADINIS, ROBERT L

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 03/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/659,018

Applicant(s)
DAVID GABRIEL

Examiner
ROBERT L. DEBERADINIS

Art Unit
2836



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 8, 2000
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 20) ☐ Other:

Art Unit: 2836

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 3-5,9-11 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Claim 3 recites the limitation "...the HEV's high voltage DC bus." There is insufficient antecedent basis for this limitation in the claim.
3. Claim 4 recites the limitation "...the HEV's system controllers." There is insufficient antecedent basis for this limitation in the claim.
4. Claim 5 recites the limitation "...the HEV's battery electronic control unit." There is insufficient antecedent basis for this limitation in the claim.
5. Claim 9 recites a method having an apparatus as a method step. "Switching means to control apparatus functions..." , also remove all parenthesis in the claim. The "and" at the end of the claim indicates that the claim is not complete.
6. Claim 16 recites the limitation "...the traction inverter", "...the HPU function", "... the filter". There is insufficient antecedent basis for these limitations in the claim.

Art Unit: 2836

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5,9,10,11,12,13,14-20 rejected under 35 U.S.C. 103(a) as being unpatentable over REUYL 4,182,960.

Regarding claims 1-5,9,11,10,12,13,14-20.

REUYL discloses a home power unit apparatus to act as a battery charger or generator in a hybrid electric vehicle comprising (refer to figure 1):

a control unit (master control 48);
connection means to the HEV and external electrical loads or sources (interface 16); and ,
switching means to change operation between charger and generator function
(control 54).

REUYL does not disclose a transformer an inverter means or rectifier means, however REUYL discloses power conditioner 38 to provide the desired voltage levels and form of current, either alternating or direct.

It would have been obvious to one having ordinary skill in the art at the time of this invention to include a transformer an inverter means or rectifier means to provide the desired voltage levels and form of current to satisfy the load requirements.

Art Unit: 2836

Regarding claim 11.

There are many well known energy safety devices. The above reference does not disclose energy safety devices. It is an inherent design feature to design a power system to limit the current drawn in a circuit. It would have been obvious to one having ordinary skill in the art at the time of this invention include an energy safety device such as a fuse to limit the current drawn by the load, to protect the HPU from burning up in an overload condition.

Claims 6,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over REUYL 4,182,960 in view of SCHNEIDER 3,655,991.

Regarding claim 6,8.

REUYL discloses the limitations of claim 1. REUYL does not disclose a momentary two position switch on the instrument panel. SCHNEIDER discloses a power output unit having a two position switch including momentary action located on the control panel of the power output unit to control the unit, refer to SCHNEIDER column 4, line 20. It would have been obvious to one having ordinary skill in the art at the time of this invention to provide a momentary two position switch on the instrument panel to initialize the transfer of power either from the HPU to the residence system or from the residence system to the HEV.

Regarding claim 7.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over REUYL 4,182,960 in view of KUNIMATSU 6,232,961.

Art Unit: 2836

REUYL disclose the limitations of claim 1. REUYL does not disclose wherein the switching means comprises a menu selection from on-screen display mounted on the instrument panel. KUNIMATSU discloses display apparatus displays small button display to select next display option, refer to the abstract. It would have been obvious to one having ordinary skill in the art at the time of this invention to provide a display apparatus whereby a display provided control options that light when the option was available to the operator, to guide the operator.

Any inquiry concerning this communication should be directed to Robert L. DeBeradinis whose number is (703) 306-5857. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached on (703) 308-3119. The fax phone number for this Group is (703) 305-7724.

RLD

FEBRUARY 27, 2002

Ronald W. Leja
RONALD W. LEJA
PRIMARY EXAMINER

3/6/02